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Dual features of magnetic susceptibility in superconducting cuprates: A comparison to inelastic neutron scattering

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Abstract

Starting from the generalized t-J-G model Hamiltonian, we analyze the spin response in the superconducting cuprates taking into account both local and itinerant spin components which are coupled to each other self-consistently. We demonstrate that derived expression reproduces the basic observations of neutron scattering data in YBa 2Cu 3O 6+y compounds near the optimal doping level. © EDP Sciences, Società Italiana di Fisica, Springer-Verlag 2012.

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